

IN THE CLAIMS

Claims 1 and 7 have been amended. New Claims 29-45 have been submitted.

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1. (currently amended) A stent for delivering a therapeutic substance in a body vessel comprising:
- a first material carried by the stent containing a therapeutic substance; and
 - a second material carried by the stent configured to convert a first type of energy received by the second material from an energy source positioned external to the body vessel to a second type of energy, wherein the second type of energy promotes release of the therapeutic substance from the first material.
2. (original) The stent of Claim 1, wherein the second material is selected from the group consisting of Au, Au-alloy, Au with a silica core, and ferrimagnetic glass-ceramic.
3. (original) The stent of Claim 1, wherein the second type of energy is thermal energy.
4. (original) The stent of Claim 1, wherein the second material is disposed in microdepots positioned on the surface of the stent.
5. (original) The stent of Claim 1, further comprising a topcoat deposited over at least a portion of the first material.
6. (original) The stent of Claim 1, wherein the second material comprises Au particles having a silica nanoparticle core.
7. (currently amended) The stent of Claim 1, further comprising a third material carried by the stent configured to convert a third type of energy received by the third material

from an energy source positioned external to the body vessel to a fourth type of energy, wherein the fourth type of energy promotes release of the therapeutic substance from the first material.

8. (original) The stent of Claim 7, wherein the first and third types of energy are electromagnetic energy, and wherein the electromagnetic energy of the first energy type has a different wavelength than the third energy type.

9. (original) The stent of Claim 1, wherein the first type of energy is non-cytotoxic electromagnetic waves.

10. (original) The stent of Claim 9, wherein the second material is capable of converting electromagnetic waves with wavelengths between 800 and 1200 nm into thermal energy.

11. (original) The stent of Claim 1, wherein the first material is a temperature-sensitive hydrogel.

12. (original) The stent of Claim 11, wherein the temperature-sensitive hydrogel is in thermal communication with the second material.

13. (original) The stent of Claim 11, wherein the temperature-sensitive hydrogel is selected from the group consisting of N-isopropylacrylamide, polyoxyethylene-polyoxypropylene block copolymers, poly(acrylic acid) grafted pluronic copolymers, chitosan grafted pluronic copolymer, elastin mimetic polypeptides, and combinations and mixtures thereof.

14. (withdrawn) A method of delivering a therapeutic substance from a stent in a body vessel comprising:

inserting into a body vessel a stent comprising a first material containing a therapeutic substance and a second material capable of converting a first type of energy to a second type of energy; and

applying to the second material a first type of energy from an energy source external to the body vessel wherein the second material converts the first type of energy to the second type of energy and the second type of energy promotes the release of the therapeutic substance from the first material.

15. (withdrawn) The method of Claim 14, wherein the second material is selected from the group consisting of Au, Au-alloy, Au having a silica core, and ferromagnetic glass-ceramic.

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Cent 16. (withdrawn) The method of Claim 14, wherein the second type of energy is thermal energy.

17. (withdrawn) The method of Claim 14, wherein the second material is disposed in microdepots positioned on the surface of the stent.

18. (withdrawn) The method of Claim 14, wherein the stent further comprises a topcoat deposited over at least a portion of the first material.

19. (withdrawn) The method of Claim 14, wherein the second material comprises Au particles having a nanoparticle core.

20. (withdrawn) The method of Claim 14, wherein the stent further comprises a third material carried by the stent to convert a third type of energy received by the third material from an energy source positioned external to the body vessel to a fourth type of energy, wherein the fourth type of energy promotes release of the therapeutic substance from the first material.

21. (withdrawn) The method of Claim 20, wherein the first and third types of energy are electromagnetic energy, and wherein the electromagnetic energy of the first energy type has a different wavelength than the third energy type.

22. (withdrawn) The method of Claim 14, wherein the first type of energy is non-cytotoxic electromagnetic waves.

23. (withdrawn) The method of Claim 22, wherein the second material is capable of converting electromagnetic waves with wavelengths between 800 and 1200 nm into thermal energy.

24. (withdrawn) The method of Claim 14, wherein the first material is a temperature-sensitive hydrogel.

25. (withdrawn) The method of Claim 24, wherein the temperature-sensitive hydrogel is in thermal communication with the second material.

26. (withdrawn) The method of Claim 24, wherein the temperature-sensitive hydrogel is selected from the group consisting of N-isopropylacrylamide, polyoxyethylene-polyoxypropylene block copolymers, poly(acrylic acid) grafted pluronic copolymers, chitosan grafted pluronic copolymer, elastin mimetic polypeptides, and combinations and mixtures thereof.

27. (withdrawn) A stent for delivering thermal energy to a body vessel comprising:
a tubular body for implanting in a body vessel; and
an energy converter carried by the tubular body to convert a first type of energy into thermal energy, wherein the energy converter is positioned to release the thermal energy to tissues adjacent to the tubular body and is responsive to an energy source remote from and not in direct physical contact with the energy converter.

28. (withdrawn) A system for delivering a therapeutic substance comprising:
a device for implanting in a patient's body;
a reservoir carried by the device containing a therapeutic substance;
an energy converter carried by the device to convert a first type of energy to a second type of energy to release the therapeutic substance from the reservoir; and
an energy emitter for emitting the first type of energy to the energy converter.

Please add the following New Claims:

29. (new) The stent of Claim 6, wherein the silica nanoparticle core has a diameter from 100 to 250 nm.

30. (new) the stent of Claim 6, wherein the Au particles include an Au shell having a thickness of 1 to 100 nm.

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Canb 32. (new) The stent of Claim 11, wherein the temperature-sensitive hydrogel is an anionic hydrogel and the therapeutic substance is a cationic substance.

33. (new) A stent for delivering a therapeutic substance comprising a carrier material supported by the stent, the carrier material encapsulating a therapeutic substance and an energy conversion material, wherein the energy conversion material is configured to convert a first type of energy received by the energy conversion material to thermal energy, and wherein the thermal energy promotes release of the therapeutic substance from the carrier material.

34. (new) The stent of Claim 33, wherein the carrier material is in the form of a particle, a microparticle, a sphere or an ovoid.

35. (new) The stent of Claim 33, wherein the energy conversion material is an Au particle.

36. (new) The stent of Claim 35, wherein the Au particle comprises a silica nanoparticle core having a diameter from 100 to 250 nm and an Au shell having a thickness of 1 to 100 nm.

37. (new) The stent of Claim 33, wherein the carrier material is disposed in microdepots positioned on the surface of the stent.

38. (new) The stent of Claim 33, further comprising a topcoat deposited over at least a portion of the carrier material.

39. (new) The stent of Claim 38, wherein the topcoat comprises a hydrophilic polymer.

40. (new) The stent of Claim 33, wherein the energy conversion material is a ferromagnetic glass-ceramic.

41. (new) The stent of Claim 33, wherein the carrier material is a temperature-sensitive hydrogel.

42. (new) A stent for delivering a therapeutic substance comprising a carrier material disposed on the stent containing a therapeutic substance, and an energy conversion material carried by the stent, wherein the energy conversion material is configured to convert a first type of energy received by the energy conversion material to thermal energy, and wherein the thermal energy causes the carrier material to contract and elute the therapeutic substance from the stent.

43. (new) The stent of Claim 42, wherein the carrier material is a temperature-sensitive hydrogel.

44. (new) The stent of Claim 43, wherein the hydrogel has a lower critical solution temperature greater than 37°C.

45. (new) A stent for delivering a therapeutic substance in a body vessel comprising:
a first material carried by the stent containing a therapeutic substance; and

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Concl a second material carried by the stent configured to convert a first type of energy received by the second material to a second type of energy, wherein the second type of energy promotes release of the therapeutic substance from the first material.
